

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: FAIL-SAFE

Report Number: P973071

Luminaire Tested: FLR2-14-42HE-L830-CP375

Issue Date: 3/13/2025

Test Information

Test Method: LM-79-2019
Report Number: P973071
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-281-1)
Test Lab: INNOVATION CENTER
Issue Date: 3/13/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: FAIL-SAFE
Catalog Number: FLR2-14-42HE-L830-CP375
Description: 1*4 FLR-2.0 4200 Lumen High Efficacy at 3000CCT & 80CRI with Clear Polycarbonate (0.375" thickness)

Light Source:
Ballast/Driver: -

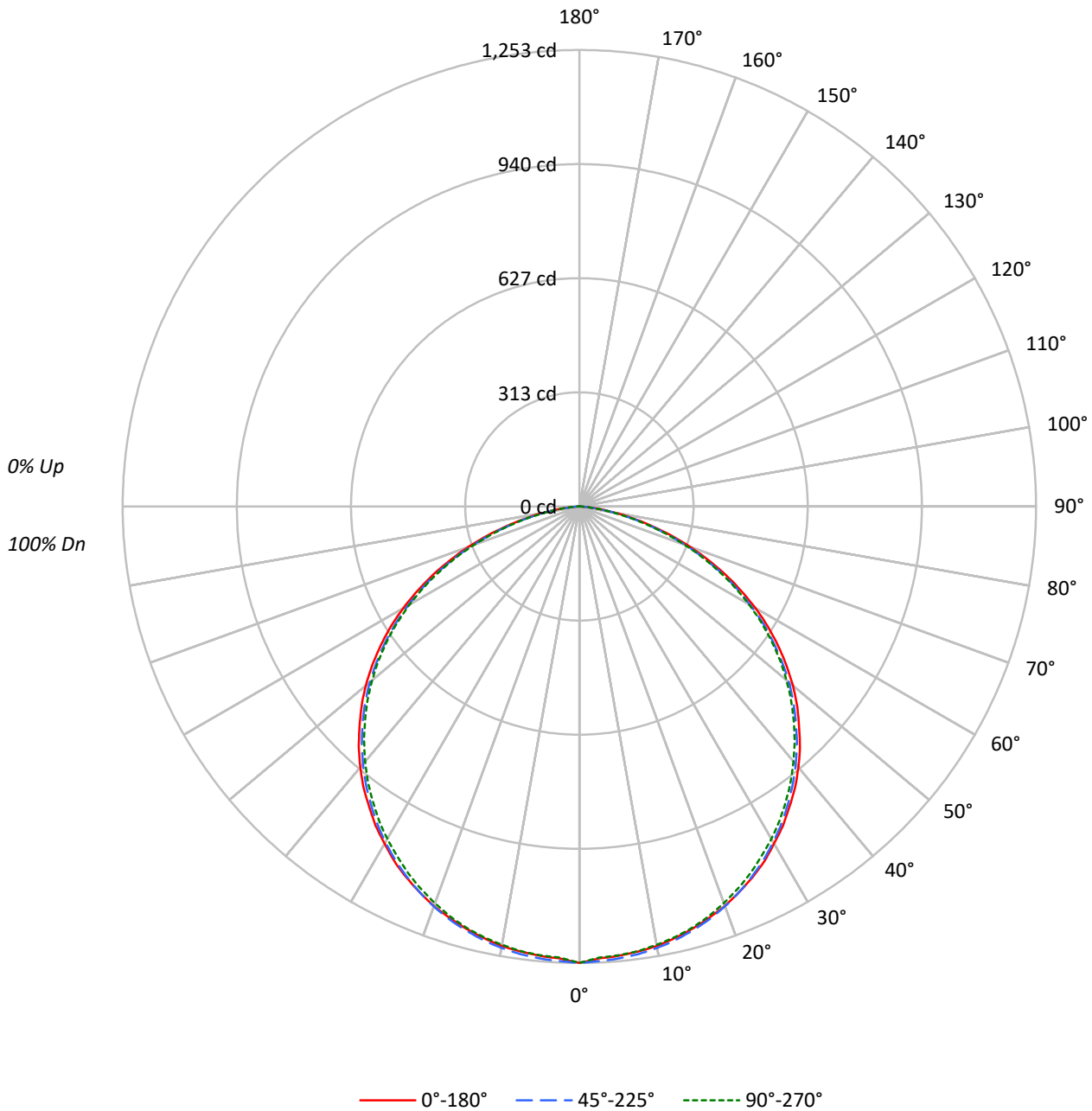
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3506.4 lumens
Efficiency: N/A
Efficacy: 109.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.38
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 31.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor:
Total Harmonic Distortion (THDi):
Frequency (hertz): 60
Stabilization Time: HR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 24 FT

TEST NUMBER: P973071
CATALOG NUMBER: FLR2-14-42HE-L830-CP375

Luminous Intensity Polar Plot





TEST NUMBER: P973071
 CATALOG NUMBER: FLR2-14-42HE-L830-CP375

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20										
RC	80									70									50									30									10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0														
RCR																																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100						100														
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85						85														
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71						71														
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60						60														
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51						51														
5	76	64	55	48	74	62	54	48	60	53	47	58	52	47	57	51	46	44						44														
6	70	57	48	42	69	56	48	42	54	47	41	53	46	41	51	45	41	39						39														
7	65	52	43	37	64	51	43	37	49	42	37	48	41	36	47	41	36	34						34														
8	61	47	39	33	59	47	38	33	45	38	33	44	37	32	43	37	32	30						30														
9	57	43	35	30	55	43	35	30	42	34	29	41	34	29	40	34	29	27						27														
10	53	40	32	27	52	39	32	27	38	32	27	38	31	27	37	31	26	25						25														

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3371	3371	3371
5°	3345	3364	3341
10°	3348	3362	3338
15°	3343	3356	3336
20°	3342	3346	3319
25°	3335	3329	3298
30°	3321	3306	3274
35°	3303	3278	3245
40°	3284	3244	3211
45°	3244	3199	3165
50°	3202	3143	3106
55°	3121	3048	3019
60°	3000	2916	2891
65°	2810	2727	2697
70°	2533	2431	2412
75°	2124	2016	1995
80°	1543	1438	1398
85°	815	719	658

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 3244 cd/sqm



TEST NUMBER: P973071
 CATALOG NUMBER: FLR2-14-42HE-L830-CP375

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.7	3.4
10°-20°	340.8	9.7
20°-30°	517.7	14.8
30°-40°	626.3	17.9
40°-50°	650.9	18.6
50°-60°	582.7	16.6
60°-70°	425.0	12.1
70°-80°	209.3	6.0
80°-90°	35.0	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	977.2	27.9
0°-40°	1603.4	45.7
0°-60°	2837.0	80.9
0°-90°	3506.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3506.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1253	1253	1253	1253	1253	
5°	1238	1252	1246	1258	1237	118
15°	1200	1211	1205	1215	1197	339
25°	1123	1129	1121	1126	1111	518
35°	1005	1008	998	1002	988	630
45°	852	851	841	842	832	658
55°	665	660	650	648	644	594
65°	441	436	428	425	424	436
75°	204	201	194	192	192	218
85°	26	25	23	21	21	38
90°	0	0	0	0	0	



TEST NUMBER: P973071
 CATALOG NUMBER: FLR2-14-42HE-L830-CP375

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1252.8	1252.8	1252.8	<i>1252.8</i>	1252.8
2.5°	<i>1241.9</i>	<i>1255.9</i>	<i>1249.2</i>	<i>1261.6</i>	<i>1239.3</i>
5°	1238.3	1251.8	1245.5	<i>1257.5</i>	1236.7
7.5°	1232.0	1246.0	1239.3	<i>1250.7</i>	1231.0
10°	1225.3	1237.8	1230.5	<i>1241.9</i>	1221.7
12.5°	1213.4	1225.8	1219.1	<i>1229.5</i>	1210.8
15°	1199.9	1210.8	1204.6	<i>1214.9</i>	1197.3
17.5°	1184.3	1194.7	1188.0	<i>1197.3</i>	1179.7
20°	1167.2	1175.5	1168.3	<i>1176.0</i>	1158.9
22.5°	1146.0	1153.7	1146.0	<i>1151.2</i>	1136.1
25°	1123.2	1128.9	1121.1	<i>1126.3</i>	1110.7
27.5°	1098.8	1101.9	1094.1	<i>1098.3</i>	1082.2
30°	1068.7	1072.3	1064.0	<i>1069.2</i>	1053.7
32.5°	1039.7	1041.7	1032.4	<i>1036.6</i>	1022.6
35°	1005.4	1007.5	997.7	<i>1001.8</i>	987.8
37.5°	972.8	972.3	961.9	<i>964.5</i>	952.6
40°	934.9	934.4	923.5	<i>925.6</i>	914.2
42.5°	896.0	894.0	883.6	<i>884.6</i>	874.3
45°	852.5	851.4	840.6	<i>842.1</i>	831.7
47.5°	810.5	807.4	796.5	<i>797.0</i>	788.2
50°	764.8	760.2	750.8	<i>749.8</i>	742.0
52.5°	716.1	710.9	700.5	<i>699.5</i>	693.8
55°	665.3	659.6	649.7	<i>648.2</i>	643.5
57.5°	612.9	605.7	597.9	<i>594.8</i>	591.1
60°	557.4	550.7	541.9	<i>538.8</i>	537.2
62.5°	499.9	493.1	486.4	<i>483.3</i>	481.2
65°	441.3	436.1	428.3	<i>425.2</i>	423.6
67.5°	381.6	377.0	369.7	<i>366.1</i>	365.6
70°	322.0	317.3	309.0	<i>307.0</i>	306.5
72.5°	262.4	258.2	250.5	<i>248.4</i>	248.4
75°	204.3	200.7	193.9	<i>191.9</i>	191.9
77.5°	149.3	146.2	141.0	<i>138.4</i>	138.4
80°	99.6	97.5	92.8	<i>90.7</i>	90.2
82.5°	57.6	56.5	52.4	<i>50.3</i>	51.3
85°	26.4	25.4	23.3	<i>20.7</i>	21.3
87.5°	6.7	6.2	4.7	<i>3.6</i>	4.7
90°	0.0	0.0	0.0	<i>0.0</i>	0.0

(END OF REPORT)